

WHAT IS CLAIMED IS:

1. A method for preparing a MALDI sample plate, comprising:
 - (a) contacting a sample with an array of features containing different capture agents;
 - (b) processing any analytes bound to said capture agents for MALDI analysis; and,
 - (c) transferring any products from step (b) to features of a MALDI sample plate, to prepare said MALDI sample plate.
2. The method of claim 1, wherein step (a) employs an automated fluid delivery device, and steps (b) and (c) employ the same automated fluid delivery device.
3. The method of claim 2, wherein said device is a pulse-jet fluid delivery device.
4. The method of claim 2, wherein said device is a contact fluid delivery device.
5. The method of claim 1, wherein said array of features is fabricated by depositing said capture agents onto a substrate using a fluid delivery device that is also employed in steps (a) and (b).
6. The method of claim 1, wherein said array comprises a substrate having fluid retaining structures.
7. The method of claim 6, wherein said substrate is a planar substrate.
8. The method of claim 1, wherein said contacting step comprises separating analytes that are bound to said capture agents from those that are not bound to said capture agents.
9. The method of claim 1, further comprising:
 - drying said transferred products on said MALDI sample plate.
10. The method of claim 1, wherein said capture agents are antibodies.

11. The method of claim 1, wherein said capture agents comprise an affinity label for binding to a solid support.
12. A method for assessing a sample, comprising:
 - performing the method of claim 1; and
 - (d) evaluating said transferred products using a MALDI mass spectrometer, to assess said sample.
13. The method of claim 12, wherein said evaluating is determining molecular weights of analytes bound to said capture agents.
14. The method of claim 13, further comprising comparing said obtained molecular weights to molecular weights of pre-determined analytes.
15. The method of claim 14, wherein said molecular weights for said pre-determined analytes are in a database.
16. The method of claim 12, wherein said evaluating is determining amounts of said analytes bound to said capture agents.
17. The method of claim 12, wherein said evaluating is qualitative or quantitative.
18. The method of claim 12, wherein said evaluating is assessing the formation of capture agent/analyte complexes relative to the formation of control capture agent/analyte complexes.
19. An automated system for preparing analytes for analysis by mass spectrometry, comprising:
 - an automated fluid delivery device that is fluidically connected to:
 - a sample containing said analytes; and
 - MALDI processing reagents;
 - wherein said system can sequentially deposit said sample and said agents onto the surface of an array.

20. The system of claim 19, wherein said automated fluid delivery device is further fluidically connected to:

a solution of capture agents,

wherein said system can deposit said capture agents onto the surface of an array prior to depositing said analytes and MALDI processing agents.

21. The system of claim 19, wherein said automated fluid delivery device is capable of transferring said sample and said reagents from the surface of said array to the surface of a MALDI sample plate.

22. The system of claim 20, wherein said array comprises a substrate comprising fluid retaining structures.

23. The automated system of claim 22, wherein said fluid-retaining structures comprise hydrophobic boundaries.

24. The system of claim 19, wherein said device is a robotic device.

25. The system of claim 24, wherein said device is a pulse-jet fluid delivery device.

26. The method of claim 24, wherein said device is a contact fluid delivery device.

27. The automated system of claim 19, wherein said MALDI processing reagents contain cleavage reagents or a MALDI matrix.

28. A method comprising transmitting data from a method of claim 12 from a first location to a second location.

29. The method of claim 28, wherein said second location is a remote location.

30. A method comprising receiving a transmitted result of a reading of an array obtained according to the method of claim 12.

31. A kit for analyzing a sample, comprising:

a plurality of capture agents; and
instructions for preparing a MALDI sample plate using said capture agents using
the method of claim 1.

32. The kit of claim 31, wherein said captures agents are present in an array.

33. The kit of claim 31, further comprising MALDI processing reagents.

34. The kit of claim 33, wherein said MALDI processing reagents comprise at least one
cleavage reagent.

35. A computer-readable medium comprising:
programming for controlling the automated system of claim 19.

36. A computer comprising the computer-readable medium of claim 34.

37. A computer implemented method for preparing a MALDI sample plate,
comprising:

directing a fluid delivery device to:

- (a) contact a sample with an array of features containing capture agents;
- (b) process any analytes bound to said capture agents for MALDI analysis; and,
- (c) transfer any products from step (b) from said array to features of a MALDI

sample plate,

to prepare said MALDI sample plate.